0200

OIPE

RAW SEQUENCE LISTING DATE: 07/05/2000
PATENT APPLICATION: US/09/599,087 TIME: 18:53:55

Input Set : A:\00450seq.txt
Output Set: N:\CRF3\07052000\I599087.raw

ENTERED

```
      3 <110> APPLICANT: Polverino, Anthony J.
      4       Luethy, Roland
      6 <120> TITLE OF INVENTION: Secreted Epithelial Colon Stromal-1 Molecules and Uses
      7       Thereof
      9 <130> FILE REFERENCE: 00-450
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/599,087
C--> 12 <141> CURRENT FILING DATE: 2000-06-21
     14 <160> NUMBER OF SEQ ID NOS: 21
     16 <170> SOFTWARE: PatentIn Ver. 2.0
     18 <210> SEQ ID NO: 1
     19 <211> LENGTH: 744
     20 <212> TYPE: DNA
     21 <213> ORGANISM: Mus musculus
     23 <220> FEATURE:
     24 <221> NAME/KEY: CDS
     25 <222> LOCATION: (38)..(274)
     27 <400> SEQUENCE: 1
     28 gcttcctccc taggcgtgag actccggctc cttcact atg aga ctt cta gcc ctt  55
     29                                        Met Arg Leu Leu Ala Leu
     30                                          1               5
     32 tcc ggt ctg ctc tgc atg ctg ctc ctc tgt ttc tgc att ttc tcc tca  103
     33 Ser Gly Leu Leu Cys Met Leu Leu Leu Cys Phe Cys Ile Phe Ser Ser
     34             10                  15                  20
     36 gaa ggg aga aga cat cct gcc aag tcc ttg aaa ctc agg cgc tgc tgt  151
     37 Glu Gly Arg Arg His Pro Ala Lys Ser Leu Lys Leu Arg Arg Cys Cys
     38         25                  30                  35
     40 cac cta tct cct aga tcc aag ctg aca acc tgg aaa gga aac cac aca  199
     41 His Leu Ser Pro Arg Ser Lys Leu Thr Thr Trp Lys Gly Asn His Thr
     42     40                  45                  50
     44 agg ccc tgc aga ctc tgc aga aac aag cta cca gtc aag tca tgg gtg  247
     45 Arg Pro Cys Arg Leu Cys Arg Asn Lys Leu Pro Val Lys Ser Trp Val
     46  55                  60                  65                  70
     48 gtg cct ggg gct ctc cca cag ata tag ggcctcctcc gcccagatga       294
     49 Val Pro Gly Ala Leu Pro Gln Ile
     50                 75
     52 agcgttgatg cccagatgtg gagacaccag aagcatacac actatgttgc cttgcccctt 354
     54 gccaatgagc tgtgacactg gaatgcttca cttcagacat cagggcggat ggattgcaga 414
     56 attccaagtc ctcattccaa aggtgtcacc aaccttcaga gtcactaagg tccaggctca 474
     58 gcccacaagt caccatggct cctccagagt aaaagtccaa gattccacct gtgggagcta 534
     60 cagatccaga gactttcaag ctgactagag tgcagagaag caagacctca gtgtgatcag 594
     62 ccgagactac agcatcttgg gaaccctcag tcagccccaa acccctaaca cttaaccact 654
     64 ggtctccaaa ccaacacctg taacttccta atgaaatcat caggaggata ccaaaagaaa 714
     66 taaaccataa atcagcatac acactaaaaa                                744
     69 <210> SEQ ID NO: 2
     70 <211> LENGTH: 78
     71 <212> TYPE: PRT
     72 <213> ORGANISM: Mus musculus
```

RAW SEQUENCE LISTING DATE: 07/05/2000
PATENT APPLICATION: US/09/599,087 TIME: 18:53:55

Input Set : A:\00450seq.txt
Output Set: N:\CRF3\07052000\I599087.raw

```
74 <400> SEQUENCE: 2
75 Met Arg Leu Leu Ala Leu Ser Gly Leu Leu Cys Met Leu Leu Leu Cys
76   1               5                  10                  15
78 Phe Cys Ile Phe Ser Ser Glu Gly Arg Arg His Pro Ala Lys Ser Leu
79              20                  25                  30
81 Lys Leu Arg Arg Cys Cys His Leu Ser Pro Arg Ser Lys Leu Thr Thr
82          35                  40                  45
84 Trp Lys Gly Asn His Thr Arg Pro Cys Arg Leu Cys Arg Asn Lys Leu
85      50                  55                  60
87 Pro Val Lys Ser Trp Val Val Pro Gly Ala Leu Pro Gln Ile
88  65                  70                  75
91 <210> SEQ ID NO: 3
92 <211> LENGTH: 54
93 <212> TYPE: PRT
94 <213> ORGANISM: Mus musculus
96 <400> SEQUENCE: 3
97 Arg Arg His Pro Ala Lys Ser Leu Lys Leu Arg Arg Cys Cys His Leu
98   1               5                  10                  15
100 Ser Pro Arg Ser Lys Leu Thr Thr Trp Lys Gly Asn His Thr Arg Pro
101             20                  25                  30
103 Cys Arg Leu Cys Arg Asn Lys Leu Pro Val Lys Ser Trp Val Val Pro
104         35                  40                  45
106 Gly Ala Leu Pro Gln Ile
107      50
110 <210> SEQ ID NO: 4
111 <211> LENGTH: 806
112 <212> TYPE: DNA
113 <213> ORGANISM: Homo sapiens
115 <220> FEATURE:
116 <221> NAME/KEY: CDS
117 <222> LOCATION: (29)..(274)
119 <400> SEQUENCE: 4
120 ggaacgaggg aaaatctgcc ttctcacc atg agg ctt cta gtc ctt tcc agc    52
121                                Met Arg Leu Leu Val Leu Ser Ser
122                                  1               5
124 ctg ctc tgt atc ctg ctt ctc tgc ttc tcc atc ttc tcc aca gaa ggg   100
125 Leu Leu Cys Ile Leu Leu Leu Cys Phe Ser Ile Phe Ser Thr Glu Gly
126      10                  15                  20
128 aag agg cgt cct gcc aag gcc tgg tca ggc agg aga acc agg ctc tgc   148
129 Lys Arg Arg Pro Ala Lys Ala Trp Ser Gly Arg Arg Thr Arg Leu Cys
130  25                  30                  35                  40
132 tgc cac cga gtc cct agc ccc aac tca aca aac ctg aaa gga cat cat   196
133 Cys His Arg Val Pro Ser Pro Asn Ser Thr Asn Leu Lys Gly His His
134                  45                  50                  55
136 gtg agg ctc tgt aaa cca tgc aag ctt gag cca gag ccc cgc ctt tgg   244
137 Val Arg Leu Cys Lys Pro Cys Lys Leu Glu Pro Glu Pro Arg Leu Trp
138              60                  65                  70
140 gtg gtg cct ggg gca ctc cca cag gtg tag cactcccaaa gcaagactcc     294
141 Val Val Pro Gly Ala Leu Pro Gln Val
```

RAW SEQUENCE LISTING DATE: 07/05/2000
PATENT APPLICATION: US/09/599,087 TIME: 18:53:55

Input Set : A:\00450seq.txt
Output Set: N:\CRF3\07052000\I599087.raw

```
142          75                  80
144 agacagcgga gaacctcatg cctggcacct gaggtaccca gcagcctcct gtctcccctt 354
146 tcagccttca cagcagtgag ctgcaatgtt ggagggcttc atctcgggct gcaaggaccc 414
148 tgggaaagtt ccagaactcc acgtccttgt ctcaattgtg ccatcaactt tcagagctat 474
150 catgagccaa cctcacccca cagggcctca gtcgccacca tgtgggcctc tccagtgcaa 534
152 accaccgagc attccaccat gaccggtcac agctacaaat ccagagacca tcaatcctgc 594
154 tagagtgcag ggtggcaagc acccaagggt ggctgaccaa gactgcagag tctcctccat 654
156 cttcaggtcc attcagcctc ctggcattta actaccagca tccagtggtc cccaaggaat 714
158 cccttcctag cctcctgaca tgagtctgct ggaaagagca tccaaacaaa caagtaataa 774
160 ataaataaat aaactcaatg cagacacaaa aa                              806
163 <210> SEQ ID NO: 5
164 <211> LENGTH: 81
165 <212> TYPE: PRT
166 <213> ORGANISM: Homo sapiens
168 <400> SEQUENCE: 5
169 Met Arg Leu Leu Val Leu Ser Ser Leu Leu Cys Ile Leu Leu Leu Cys
170   1               5                  10                  15
172 Phe Ser Ile Phe Ser Thr Glu Gly Lys Arg Arg Pro Ala Lys Ala Trp
173              20                  25                  30
175 Ser Gly Arg Arg Thr Arg Leu Cys Cys His Arg Val Pro Ser Pro Asn
176          35                  40                  45
178 Ser Thr Asn Leu Lys Gly His His Val Arg Leu Cys Lys Pro Cys Lys
179      50                  55                  60
181 Leu Glu Pro Glu Pro Arg Leu Trp Val Val Pro Gly Ala Leu Pro Gln
182  65                  70                  75                  80
184 Val
187 <210> SEQ ID NO: 6
188 <211> LENGTH: 57
189 <212> TYPE: PRT
190 <213> ORGANISM: Homo sapiens
192 <400> SEQUENCE: 6
193 Lys Arg Arg Pro Ala Lys Ala Trp Ser Gly Arg Arg Thr Arg Leu Cys
194   1               5                  10                  15
196 Cys His Arg Val Pro Ser Pro Asn Ser Thr Asn Leu Lys Gly His His
197              20                  25                  30
199 Val Arg Leu Cys Lys Pro Cys Lys Leu Glu Pro Glu Pro Arg Leu Trp
200          35                  40                  45
202 Val Val Pro Gly Ala Leu Pro Gln Val
203      50                  55
206 <210> SEQ ID NO: 7
207 <211> LENGTH: 77
208 <212> TYPE: PRT
209 <213> ORGANISM: Rattus norvegicus
211 <400> SEQUENCE: 7
212 Met Arg Leu Leu Thr Leu Ser Gly Leu Phe Phe Met Leu Phe Leu Cys
213   1               5                  10                  15
215 Leu Cys Val Leu Ser Ser Glu Gly Arg Lys Arg Pro Ala Lys Phe Pro
216              20                  25                  30
218 Lys Leu Arg Pro Arg Cys His Leu Ser Pro Arg Ser Lys Pro Ile Thr
```

RAW SEQUENCE LISTING DATE: 07/05/2000
PATENT APPLICATION: US/09/599,087 TIME: 18:53:55

Input Set : A:\00450seq.txt
Output Set: N:\CRF3\07052000\I599087.raw

```
219          35                  40                  45
221 Trp Lys Gly Asn His Thr Arg Pro Cys Arg Pro Cys Arg Lys Leu Glu
222      50                  55                  60
224 Ser Asn Ser Trp Val Val Pro Gly Ala Leu Pro Gln Ile
225  65                  70                  75
228 <210> SEQ ID NO: 8
229 <211> LENGTH: 4159
230 <212> TYPE: DNA
231 <213> ORGANISM: Homo sapiens
233 <220> FEATURE:
234 <221> NAME/KEY: unsure
235 <222> LOCATION: (160)..(169)
237 <220> FEATURE:
238 <221> NAME/KEY: unsure
239 <222> LOCATION: (3884)..(3893)
241 <220> FEATURE:
242 <221> NAME/KEY: exon
243 <222> LOCATION: (1)..(69)
245 <220> FEATURE:
246 <221> NAME/KEY: exon
247 <222> LOCATION: (2627)..(2725)
249 <220> FEATURE:
250 <221> NAME/KEY: exon
251 <222> LOCATION: (4079)..(4159)
253 <400> SEQUENCE: 8
254 atg agg ctt cta gtc ctt tcc agc ctg ctc tgt atc ctg ctt ctc tgc   48
256 ttc tcc atc ttc tcc aca gaa ggtagggcag cccccagggt gcagatccct      99
258 gagcaggatt tcagcatctg ggaagactct gatcaggatt tgttggaggg caggccttgg 159
W--> 260 nnnnnnnnnn cgcgcgtact tccagccccg tggtgaagac gaaagagggc tctttctcct 219
262 gaacctatag gtttggggct caggactgcc tgcaggtggc ttgggggttc cattcacagc 279
264 ccctgcaccc ccaaatacat acccagccta agtaaagtgg tgtgttcgcc atgcaaacac 339
266 acatacaacc tctcagctag attactgtgc ttaagtccta cctatctaga atttctggag 399
268 ccattctctt gtacttgtgt catgcttgga acagagtaaa ttagtgttgg gcaaatgaat 459
270 acattaatta gtagaccatc taagtctgaa catcccaaaa cctcatgccc agaaaatatc 519
272 catgagcagc tgaaatgaag gtgtgtgtgg tagggaggtg gggtatgttt atgcatgttt 579
274 agaaggggac accatctttt tacctctata gatatgaata tttagctctc ttgccctttt 639
276 ttctttttttc ttttttttttt ttttttgag atggagtctt gctctgtcac ccaggctgga 699
278 gtgcagtggc gctatctcag ctcactgcaa tctccgcctc ctgggttcaa gcaattctct 759
280 gcctcagcct cccaagtagc tgagattaca ggtgcccacc accaagccca gctaattttt 819
282 gtatttttag tacagacagg tttcaccatc ttggccaggc tggtcttgaa ctcctaacct 879
284 cgtaatcctc ccacctcggc ctcccaaagt gctgggatta caggcgtgag ccaccatgcc 939
286 tggctgcctt tcttgattca gatagctgag tgtttcaatc cattttttctc ttgtctaacc 999
288 ctctagaaac tgcctacatt tatttttttgt tttagtggtt atggttactc aaacttttgg 1059
290 gtgggggggag ctggagctat agaaatatat aaagagaaga aaaacactca attccatgat 1119
292 tcaagagtag ccatgttcaa cattttgttt atttccttgc atgtagaatt tttaaaaatt 1179
294 aattgatgta cctatatgtt caaggttata tctttttttat ttatcactat atatattgtt 1239
296 ataatcaccc aaaatgctta tgattgaaga tattctggaa gcatttacaa cccagtgtca 1299
298 gcagcagcca tctctgagta gtgggattat aacaagtgtt tgttttacaa agtttctgcg 1359
300 atgaaaatgt cccacatata taataaggaa aacagtgatt agaattcctc ataaacacag 1419
```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

RAW SEQUENCE LISTING DATE: 07/05/2000
PATENT APPLICATION: US/09/599,087 TIME: 18:53:55

Input Set : A:\00450seq.txt
Output Set: N:\CRF3\07052000\I599087.raw

```
302 cccgtgacat gcaatttatc agacctctat ttttggacat gttggaggtt gccagtgata 1479
304 ccctagtgac aattaaatga ggatagatac cttcccccat aaagtttcct atccatttag 1539
306 gactatctgt agcaaactct tgaagtagca ttaatcaact aatattttca ggtataactt 1599
308 gctacaagtg aacgtactat gatgaattta catgcttaga catttagata gttcacaatt 1659
310 gtgtgctttt ccttttttga agcaagatct tgctctcttg cccaggtcgg agtgcagtgg 1719
312 catgaccacg gctcagtgca ggcttgactt ccagggctca agcaatactc gcacctcagg 1779
314 ttttccagta gctgggaaaa caggtgcgca ccacaatgcc ctgctaattt ttaaaatttt 1839
316 ttgcagagac gaggtctctc taagttgccc aggctggtct tgaacttctg gactcaagcc 1899
318 atcctcccac cttggcctcc cagagtgcta ggatcacagg catgagccac cacacctggc 1959
320 ctactttgca cattttaatt atgtggtaaa aggtatatat gtacataaag tatgtccttt 2019
322 attcaggctt tttttctttt tttctttttt ttatttttt gagacgaagt ttttgctctt 2079
324 gttgtccagg ctggagtgta atggcatgct cttggctcac cacaacctcc gcctcccggg 2139
326 ttcaagtgat tctcctgcct caacctcctg agtagctggg attacaggca tgcaccaaca 2199
328 tgccaggctg attttgtatt tttagtagag atggggtttc tccatgttgg tcaggctggt 2259
330 ctcgaacact cgacctcaag tgatccgccc acctcagcct cccaaagagc taggattaca 2319
332 ggcatgagcc accacaccca gctcagggct tattttctta ggctagattg ccaaggggag 2379
334 aattattatg tcaaagaaac tacttattgg acaggaatct gaaaaggatg tgttttgggg 2439
336 ccatgtgtct cccaacattg ttatttctga aaagtaaatc acaacaaggc ccactctttc 2499
338 cctaggacct ctcgtagcct ggctcatcct gagtttctct ggataaatat tcctgagccc 2559
340 tgtgccttgg aaggggaagc tcactcacag acaagcccac taaagacagt ctctcttcct 2619
342 ttgtgtc cac cct cag gga aga ggc gtc ctg cca agg cct ggt cag gca   2668
344 gga gaa cca ggc tct gct gcc acc gag tcc cta gcc cca act caa caa   2716
346 acc tga aag gtaagtaccc ccacctcgtc cagactgtgg ggcagaagtt          2765
348 ctacagtggc catgggacca gccacacaca ctgatcagcc cccacccatg gctggcatca 2825
350 ggctctggct gggaggacat ctttgttttg ttgattaatt tgttgactcc cccccaaaag 2885
352 tcaacaaatt aatcatttta aactgaatac attctgccat ggaaaaaaag caggatgcaa 2945
354 ttagcagatg ttgtgtggaa acacacttac tttaggtgga aggtgtctga gcaggtgaca 3005
356 tttatgagac ctggctcatt tatgagccag gagcctggct gaggcctgtg gaggtggggc 3065
358 atgcaggcag aggaggcagc aagggtgaag ggcaagagtg gggtatggaa gacagatggt 3125
360 agcagggctt gagaggtact cccagaagct aaggaccaaa gctgcctgtg aaccctgtgg 3185
362 acctggggca cagatcagca tgcaggtcac cagcagggga gtgggcctga gggtccagag 3245
364 agccatagct tggcaggaga taaggcagcc ccagagatgc cagcaggcag catccaggct 3305
366 gcatgaccag aacgaggccc agaagagcaa ggctgccctc tccctgaggc ctggggacac 3365
368 tgggaggcct gtggcggaca ggcccaagct caggagggct gcgggcaccc agttccctgc 3425
370 acaggggctg caggcccaga gcagatattc actggagttg cccagcccag gtggaagggt 3485
372 caggctgctg gagcttgggt agggcaggca gatccccaag gggagactgt ggaccctgag 3545
374 tcagacagcc tgacaccaac ctggggctcc tgcctgaact ctgcagcccc agtgcccact 3605
376 ctcaagaggc tgaggaggtc ccggccccac ttgctcctct gcggccatgg cccatggggt 3665
378 ccatgaccag cgccggagcc tccatgcctt tcccagctac caaggggatg ctcagctgtg 3725
380 atgcaggaga gggatagagg gaggaagcaa gacagcatga ctccagccgc agaccttctc 3785
382 ccggagatgc tgacagccct ttcttccaaa ctggcatcac acccagccgg ccaggataaa 3845
W--> 384 aataaccagc tcgtcttcac cacgggctga aggatcccnn nnnnnnnnca cgaaaagccc 3905
386 cttctgggcc tccagggaaa agcataagat ctaattcttg ctttgaaatt ttttttaaa 3965
388 tgtgtttgaa aatgcaactt aattgtgttt tcctctctct ccccacaacc tggctctgac 4025
390 ctcgccatct tcctgtcctt gtccctcttg tctactcatt gctcctccca gga cat    4081
392 cat gtg agg ctc tgt aaa cca tgc aag ctt gag cca gag ccc cgc ctt   4129
394 tgg gtg gtg cct ggg gca ctc cca cag gtg                          4159
397 <210> SEQ ID NO: 9
398 <211> LENGTH: 23
```

VERIFICATION SUMMARY DATE: 07/05/2000
PATENT APPLICATION: US/09/599,087 TIME: 18:53:56

Input Set : A:\00450seq.txt
Output Set: N:\CRF3\07052000\I599087.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:260 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:8
L:260 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:8
L:384 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:8
M:340 Repeated in SeqNo=8